

manner as Example 2. The result is as follows.

Table 3

Area of the applied part	Subject 1		Subject 2		Subject 3	
	Voltage (V)	Detection of detachment	Voltage (V)	Detection of detachment	Voltage (V)	Detection of detachment
0/10	0	L	0	L	0	L
2/10	1.6	L	1.6	L	1.5	L
4/10	2.7	L	2.6	L	2.6	L
6/10	3.7	L	3.6	L	3.5	L
8/10	4.2	L	4.2	L	4.1	L
10/10	4.8	H	4.8	H	4.7	H

5 The test was conducted in such a way that the output voltage was 5 V, and one of the areas of the device in contact with the applied part of the transdermal was varied from 0/10 to 10/10. The voltage on the output terminal 21 and the output signal 28 were measured 1 ms after the analog switch 20 was opened. "L" of the output signal 28 (detection of detachment) indicates that conduction was abnormal and "H" represents that conduction was normal. From Table 3, the iontophoresis device according to Example 3 can detect detachment of the device encountered, even a small area, during the application.

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INDUSTRIAL APPLICABILITY

The iontophoresis device according to the present invention can detect conduction states with high accuracy and is applicable to iontophoresis in the field of medical care.

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CLAIMS

1. A device for iontophoresis supplying a drug to transdermal or transmcosal, comprising: first means for detecting a 5 capacitance stored in the transdermal or the transmcosal; and second means for determining a conduction state of current into the transdermal or the transmcosal based on the output detected by the first means.

2. The device for iontophoresis according to Claim 1, wherein 10 the first means is a detection circuit for a reactive current flowing through the transdermal or the transmcosal.

3. The device for iontophoresis according to Claim 1, wherein the first means is a detection circuit for a residual voltage developed in the transdermal or the transmcosal.

15 4. A method for determining an operation of an iontophoresis apparatus, wherein a capacitance stored in transdermal or transmcosal is detected to determine a conduction state of current flowing into the transdermal or the transmcosal.

5. The method for detecting an operation of an iontophoresis 20 apparatus according to Claim 4, wherein the detection of the capacitance is carried out by detecting a reactive current flowing through the transdermal or the transmcosal.

6. The method for detecting an operation of an iontophoresis apparatus according to Claim 4, wherein the detection of the 25 capacitance is carried out by detecting a residual voltage developed in the transdermal or the transmcosal.

7. An iontophoresis apparatus comprising: a preparation for

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iontophoressis, holding a drug; and a device for iontophoresis having means for generating an electrical output to supply a drug from the preparation into transdermal or transmcosal and means for detecting a capacitance stored in the transdermal 5 or the transmcosal to determine a conduction state of a current flowing into the transdermal or the transmcosal.